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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/22/2000

Christer Fahraeus

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07/19/2006

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/746,782

Applicant(s)

FAHRAEUS, CHRISTER

Examiner

Kimnhung Nguyen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed on 5/24/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9,16-18 and 20-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,16-18 and 20-40 is/are rejected.
- 7) ☒ Claim(s) 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

This application has been examined. The claims 1, 3-9, 16-18, 20-41 are pending. The examination results are as following.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lazzouni et al. (US 5,652,412).

Regarding claim 17, Lazzouni et al. discloses a method for initiating an operation in an electronic pen, comprising: using the electronic pen (10); and writing a command symbol on the surface (see pen tip on the writing surface, fig. 1) perform an operation in the electronic pen (see col. 2, lines 44-52).

As to claim 18, Lazzouni et al. discloses a method for controlling an electronic pen (10), the electronic pen being adapted to carry out at least one operation, comprising

Registering (optical position) strokes when the electronic pen is moved (optical position by raced strokes on the surface, fig. 1); determining if the strokes (s,i,a) comprise a command (sia); and carrying out an operation upon determination of the command, wherein the registering strokes includes recording the command electronically by detecting a position code arranged on

a writing surface, upon which the command is written (see encoded position information, see col. 2, lines 44-52, and see abstract, see col. 5, lines 7-12).

Regarding claim 20, Lazzouni et al. discloses further wherein the registering strokes (optical position) is performed using an optical sensor which records images of the writing surface (see detector for optical reading, see col. 4, lines 20-22), and wherein determining if the strokes (s,i,a) comprise a command (sia) further includes processing (micro-processor 132, and memory 134, fig. 7), using the position code (see coordinate position, see abstract) in the images, for providing a digital representation of the command position code in the images (see encoded position information, see col. 2, lines 44-52), for providing a digital representation of the command.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-9, and 21-27 and 34-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni et al. (US 5,652,412) in view of Beernink et al. (US 5,710,831)

Regarding claims 1, 25, Lazzouni et al. discloses in fig. 1, an electronic pen (10) which is adapted to carry out at least one operation, the electronic pen comprising: a registration device (optical position, see abstract) for registering strokes when the electronic pen is moved (see fig.

Art Unit: 2629

1, see pen tip 10 moved and tracked the “sia” on the paper 14, Lazzouni et al. discloses the strokes “s, i, a” comprises a command “sia”, fig. 1; and processor means (see microprocessor 132 and memory 134 for processing and recording the position information, see col. 4, lines 30-35) for carrying out an operation upon determination of a command (sia), wherein the registration device (optical position) is adapted to record the command electronically by detecting a position code (see encoded position information, see col. 2, lines 44-52) arranged on a writing surface, upon which the command is written (see abstract, see col. 5, lines 7-12).

However, Lazzouni et al. does not disclose the electronic pen comprises an interpretation means.

Beernink et al. discloses a handwriting on a based computer comprising a plurality of character interpretations of the character handwritten input show in fig. 2b. (see col. 7, lines 50-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the character interpretations as taught by Beernik into the electronic pen of Lazzouni et al. for producing the claimed invention because this would provide a list of character ranging from the most probable to the least probable interpretation of the input (see col. 7, lines 58-60).

Regarding claim 3, Lazzouni et al. further discloses the registration device (optical position) reading an optical sensor (see detector for optical reading, see col. 4, lines 20-22) which is adapted to record images of the writing surface (see col. 5, lines 7-9), and a signal processor,

which is adapted to use the position code in the images for providing a digital representation of the command (see col. 4, lines 30-42).

Regarding claims 4, 27, Lazzouni et al. discloses the signal processor comprises a character (alphabetic) function which is adapted to translate the digital representation of the command into character-coded format (see col. 2, lines 44-52). However, Lazzouni et al. does not disclose a character interpretation function. Beernink et al. discloses a character interpretation as discussed in claim 1.

Regarding claims 5, 38, Lazzouni et al. discloses the registration device is adapted to record a message information quantity (see recording unit coupled to the pen, see abstract), which is used in the operation, in essentially the same way as the command is recorded (see abstract).

Regarding claim 6, Lazzouni et al. discloses further the registration device is adapted to record the information quantity by detecting a position code (see encoded position information) on a writing surface (see col. 2, lines 44-52).

Regarding claims 7-9, 22-24 and 40 Lazzouni et al. discloses the electronic pen comprises registering the message information quantity, and registering the message information quantity by detecting a position code on a writing surface (see recording the position of the pen tip, see abstract, see fig. 1).

Regarding claim 26, claim 26 is similar claims 1 and 25 and discussed above.

Regarding claim 37, Lazzouni et al. discloses further wherein the registering strokes (optical position) is perform using an optical sensor which records images of the writing surface (see detector for optical reading, see col. 4, lines 20-22), and wherein determining if the strokes

Art Unit: 2629

(s,i,a) comprise a command (sia) further includes processing (micro-processor 132, and memory 134, fig. 7), using the position code (see coordinate position, see abstract) in the images, for providing a digital representation of the command position code in the images (see encoded position information, see col. 2, lines 44-52), for providing a digital representation of the command.

Regarding claim 37, Lazzouni et al. discloses further wherein the registering strokes (optical position) is performed using an optical sensor which records images of the writing surface (see detector for optical reading, see col. 4, lines 20-22), and wherein determining if the strokes (s,i,a) comprise a command (sia) further includes processing (micro-processor 132, and memory 134, fig. 7), using the position code (see coordinate position, see abstract) in the images, for providing a digital representation of the command position code in the images (see encoded position information, see col. 2, lines 44-52), for providing a digital representation of the command.

Regarding claims 21, 27, 32, Lazzouni et al. discloses a translating the digital representation of the command into character-coded format (see col. 2, lines 44-52).

Regarding claims 29, 34, Lazzouni et al. disclose the strokes as a command when the strokes are written on part of the position code which codes predetermined positions. However, Lazzouni et al. does not disclose an electronic pen comprising an interpretation means. Beernink et al. discloses the interpretation means as discussed above.

Regarding claims 30, 35, Lazzouni et al. disclose the command is a command to carry out an operation from the group of operations including dialing a telephone number (see col. 4, lines 43-46).

Regarding claims 31, 36, Lazzouni et al. disclose the command is written by alphanumeric characters (see *sia*, fig. 1).

Regarding claim 32, Lazzouni et al. discloses the interpretation means comprises character recognition means for translating the command to character-code format (see table II). However, Lazzouni et al. does not disclose an interpretation means. Beernink et al. discloses an interpretation means as discussed above.

Regarding claim 38, Lazzouni et al. discloses the registration device (optical position) is adapted to record a message information quantity (see abstract), which is used in the operation, in essentially the same way as the command is recorded (see strokes with letters s, i, a).

Regarding claim 39, Lazzouni et al. discloses the registration device is adapted to record the information quantity by detecting the position code on a writing surface as discusses above.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni et al. (US 5,652,412) in view of Yoshida (US 5,128,526).



Regarding claim 16, Lazzouni et al. discloses a software program, which is stored on a memory medium (see figs 7-8, see memory 34), which can be read by a computer and which comprises instructions for causing the computer to register strokes (s,i,a) when an electronic pen (100) moved based on received position data obtained from a position coding, determine if the strokes comprises a command (sia), and initiate a predetermined operation in the electronic pen in response to the determined command. However, Lazzouni et al. does not disclose the electronic pen comprises a position coding pattern.

Yoshida discloses in figs. 1-2a, a plurality of position coding pattern (21, 22) on the code sheet 10 (see col. 4, lines 8-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the position coding pattern as taught by Yoshida into the software program and comprises instruction for causing the computer to register strokes of Lazzouni et al. because this would be formed orthogonal coordinates, wherein a signal codes is printed to represent identification codes in the representation area (see col. 4, lines 15-18).

6. Claims 28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzouni et al. (US 5,652,412) in view of Burges et al. (US 5,727,081).

Lazzouni et al. discloses the electronic pen, wherein the position code as discussed above, and wherein the electronic pen further comprises decoding means (see C4 decoding algorithm, see col. 11, lines 5-5) for decoding the position code. However, Lazzouni et al. does not disclose the position code codes each position by a plurality of marks and adjoining positions being partly coded by means of the same marks.

Burges et al. discloses in fig. 8, a character position codes each position by a plurality of marks and adjoining positions being partly coded by means of the same marks (see fig. 8, see character position having a plurality of marks and adjoining positions coded the same marks', see col. 11, lines 63-67 and col. 12, lines 1-35 for details of the explanation).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the character position codes each position by a plurality of marks and adjoining positions being partly coded by means of the same marks as taught by Burges et al. into the electronic pen having the position code of Lazzouni et al. because this would provide all of the consegmentations and all of the possible interpretations for the input expression are represented by the set of paths extending through the graph (see abstract).

#### *Allowable Subject Matter*

7. Claim 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

None of the cited art teaches that the electronic pen as discussed, wherein the position code codes position by directions of displacements of dots from raster point as claim 41.

Art Unit: 2629

***Response To Arguments***

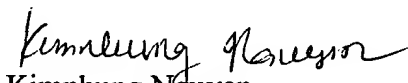
8. Applicant's arguments with respect to claims 1, 3-9, 16-18, 20-41 have been considered but are moot in view of the new ground(s) of rejection.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kimnhung Nguyen  
Patent Examiner  
July 16, 2006